AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Cancelled)

2. (Currently Amended) ~~The method of claim 1,~~ A method for use in a mobile communications system having a plurality of cell segments, comprising:

communicating control and traffic signaling in a frame having a plurality of time slots in each cell segment, the time slots being time synchronized among the cell segments; and

transmitting control signaling in time slots adjacent time slots allocated as guard periods to protect the control signaling in a time slot of a first cell segment from interference by traffic signaling in another time slot of a neighboring cell segment,

wherein transmitting the control signaling includes transmitting the control signaling in every other time slot of each frame.

3. (Currently Amended) ~~The method of claim 1,~~ A method for use in a mobile communications system having a plurality of cell segments, comprising:

communicating control and traffic signaling in a frame having a plurality of time slots in each cell segment, the time slots being time synchronized among the cell segments; and

transmitting control signaling in time slots adjacent time slots allocated as guard periods to protect the control signaling in a time slot of a first cell segment from interference by traffic signaling in another time slot of a neighboring cell segment,

wherein communicating the control and traffic signaling includes communicating the control signaling in odd time slots of each frame.

4. (Currently Amended) ~~The method of claim 1,~~ A method for use in a mobile communications system having a plurality of cell segments, comprising:

communicating control and traffic signaling in a frame having a plurality of time slots in each cell segment, the time slots being time synchronized among the cell segments; and

transmitting control signaling in time slots adjacent time slots allocated as guard periods to protect the control signaling in a time slot of a first cell segment from interference by traffic signaling in another time slot of a neighboring cell segment,

wherein each time frame includes time slots 0, 1, 2, 3, 4, 5, 6, and 7, and wherein the transmitting includes transmitting the control signaling in time slots 1, 3, and 5.

5. (Currently Amended) ~~The method of claim 1,~~ A method for use in a mobile communications system having a plurality of cell segments, comprising:

communicating control and traffic signaling in a frame having a plurality of time slots in each cell segment, the time slots being time synchronized among the cell segments; and

transmitting control signaling in time slots adjacent time slots allocated as guard periods to protect the control signaling in a time slot of a first cell segment from interference by traffic signaling in another time slot of a neighboring cell segment,

wherein each time frame includes time slots 0, 1, 2, 3, 4, 5, 6, and 7, and wherein the transmitting includes transmitting the control signaling in time slots 1, 3, 5, and 7.

6. (Currently Amended) ~~The method of claim 1,~~ A method for use in a mobile communications system having a plurality of cell segments, comprising:

communicating control and traffic signaling in a frame having a plurality of time slots in each cell segment, the time slots being time synchronized among the cell segments; and

transmitting control signaling in time slots adjacent time slots allocated as guard periods to protect the control signaling in a time slot of a first cell segment from interference by traffic signaling in another time slot of a neighboring cell segment,

wherein transmitting the control signaling includes transmitting one of a synchronization burst and a frequency correction burst.

7. (Cancelled)

8. (Currently Amended) The method of claim [[7]] 10, wherein providing time slots as guard periods includes the time slots to be idle.

9. (Cancelled)

10. (Currently Amended) ~~The method of claim 9, further comprising~~ A method for use in a mobile communications system having a plurality of cell segments, comprising:

defining a plurality of channels and a frame having a plurality of time slots;

providing a channel reuse pattern that is based on a plurality of channel frequencies and a plurality of time groups, wherein signaling is transmitted in different time slots of the frame in corresponding time groups;

providing predetermined time slots as guard periods to reduce likelihood of interference of signaling due to overlap of time slots in neighboring cell segments,

wherein the defining includes defining a frame having eight time slots; and

allocating control signaling to be carried in odd time slots of each frame.

11. (Cancelled)

12. (Currently Amended) ~~The method of claim 11,~~ A method for use in a mobile communications system, comprising:

carrying control signaling in a multiframe that includes a plurality of frames, each frame including a plurality of time slots;

communicating control signaling in predetermined time slots of predetermined frames; and

communicating idle periods in time slots allocated as guard periods adjacent the predetermined time slots of the predetermined frames,

wherein each frame includes eight time slots, and wherein communicating the control signaling includes communicating the control signaling in odd time slots of the predetermined frames.

13. (Original) The method of claim 12, wherein communicating the idle periods includes communicating the idle periods in even time slots of the predetermined frames.

14. (Original) The method of claim 13, wherein each frame includes time slots 0, 1, 2, 3, 4, 5, 6, and 7, and wherein communicating the control signaling includes communicating the control signaling in time slots 1, 3, and 5, and communicating the idle periods includes communicating the idle periods in time slots 0, 2, and 4.

15. (Original) The method of claim 13, wherein each frame includes time slots 0, 1, 2, 3, 4, 5, 6, and 7, and wherein communicating the control signaling includes communicating the control signaling in time slots 1, 3, 5, and 7, and wherein communicating the idle periods includes communicating the idle periods in time slots 0, 2, 4, and 6.

16. (Currently Amended) The method of claim [[11]] 12, further comprising communicating traffic in at least some of the frames other than the predetermined frames.

17. – 32. (Cancelled)